

NOV 8 2004

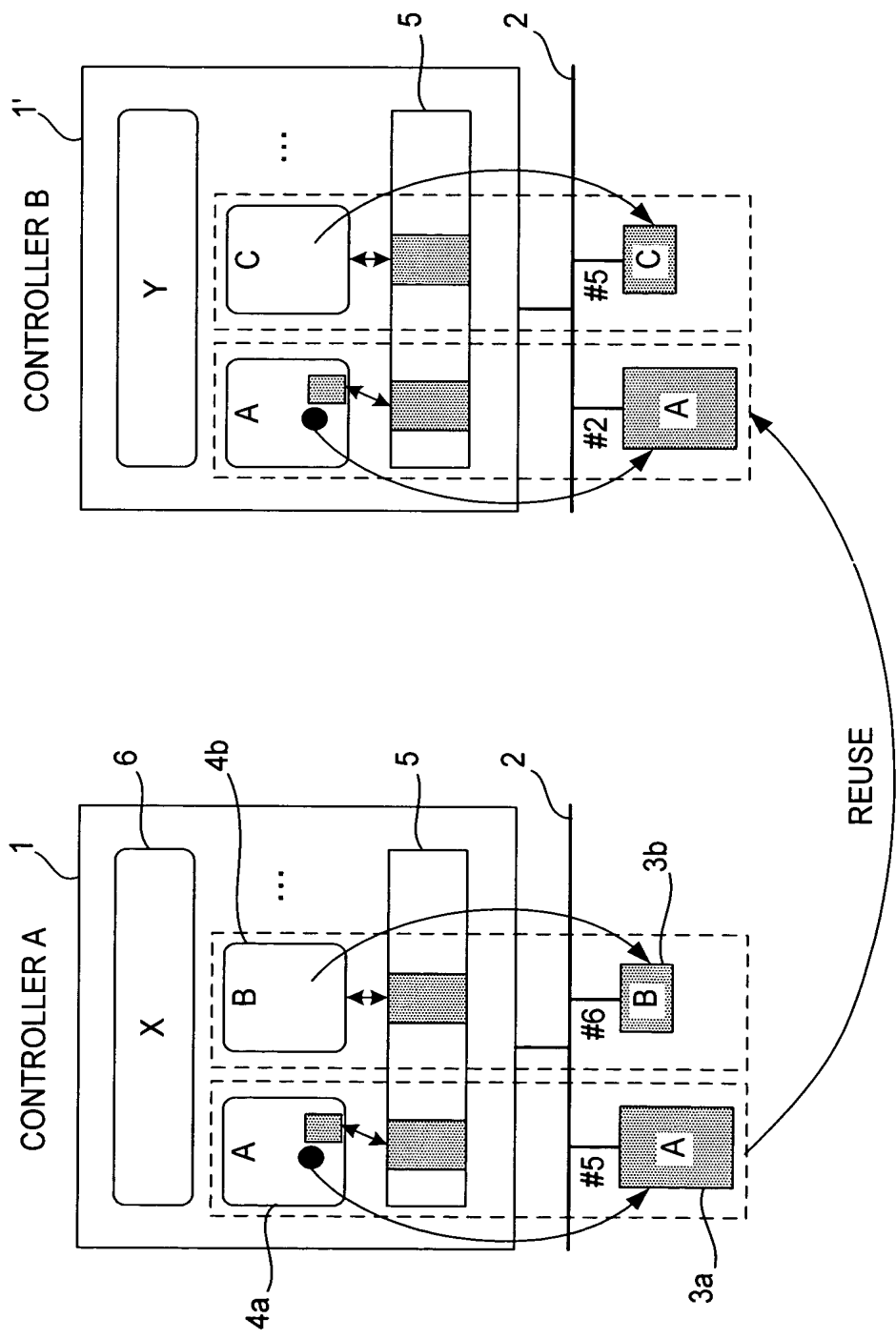


FIG. 1
(PRIOR ART)

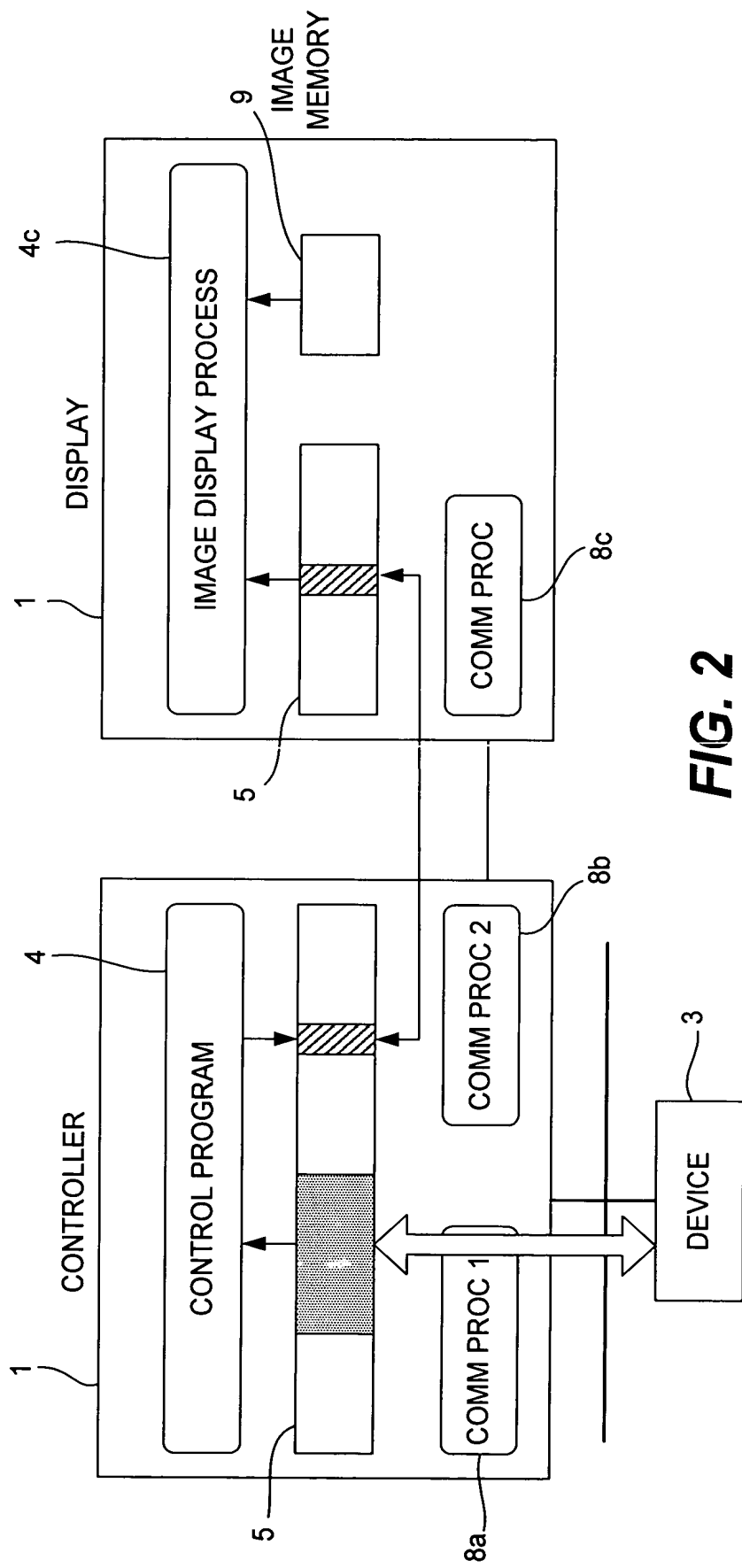


FIG. 2
(PRIOR ART)

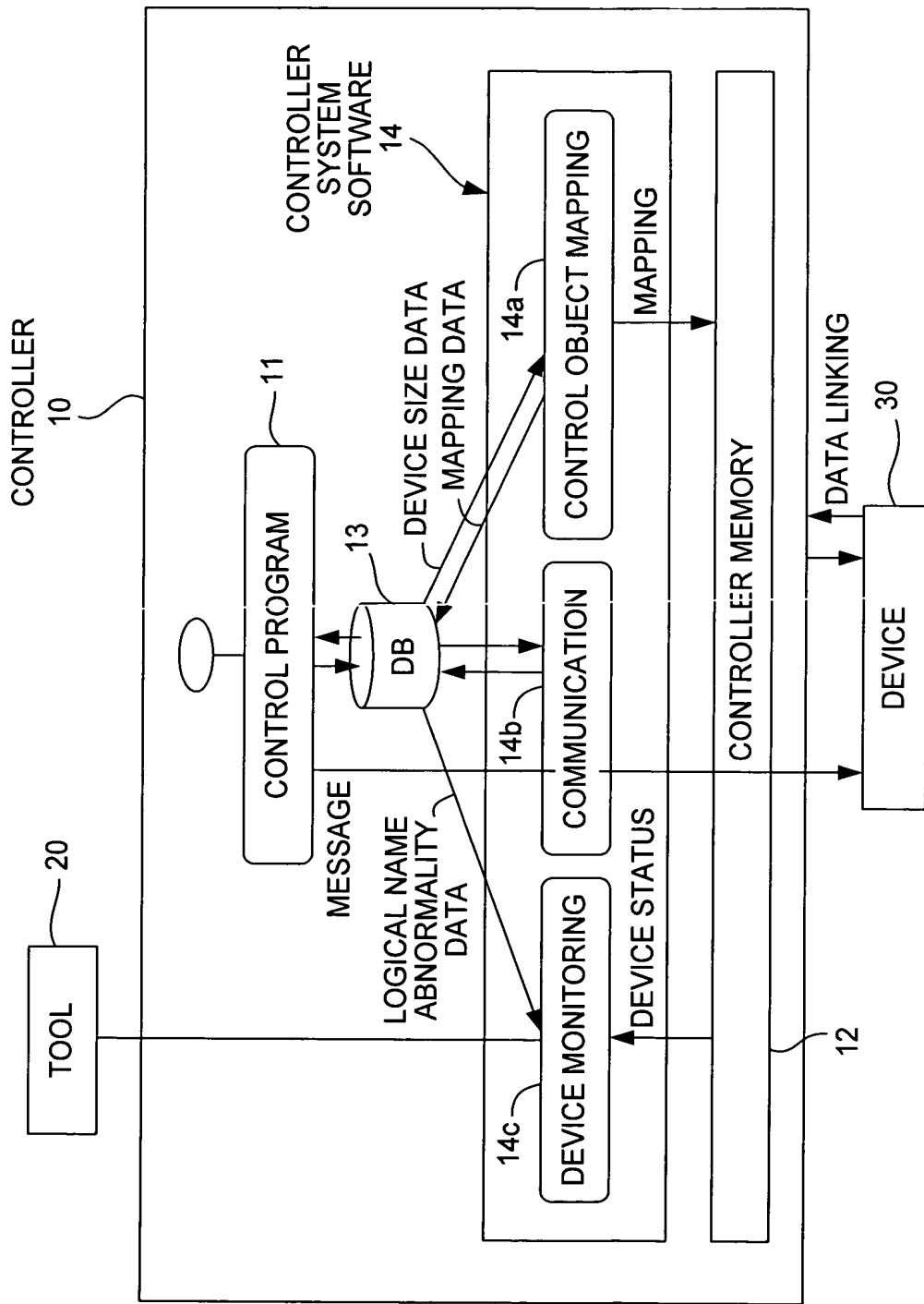


FIG. 3

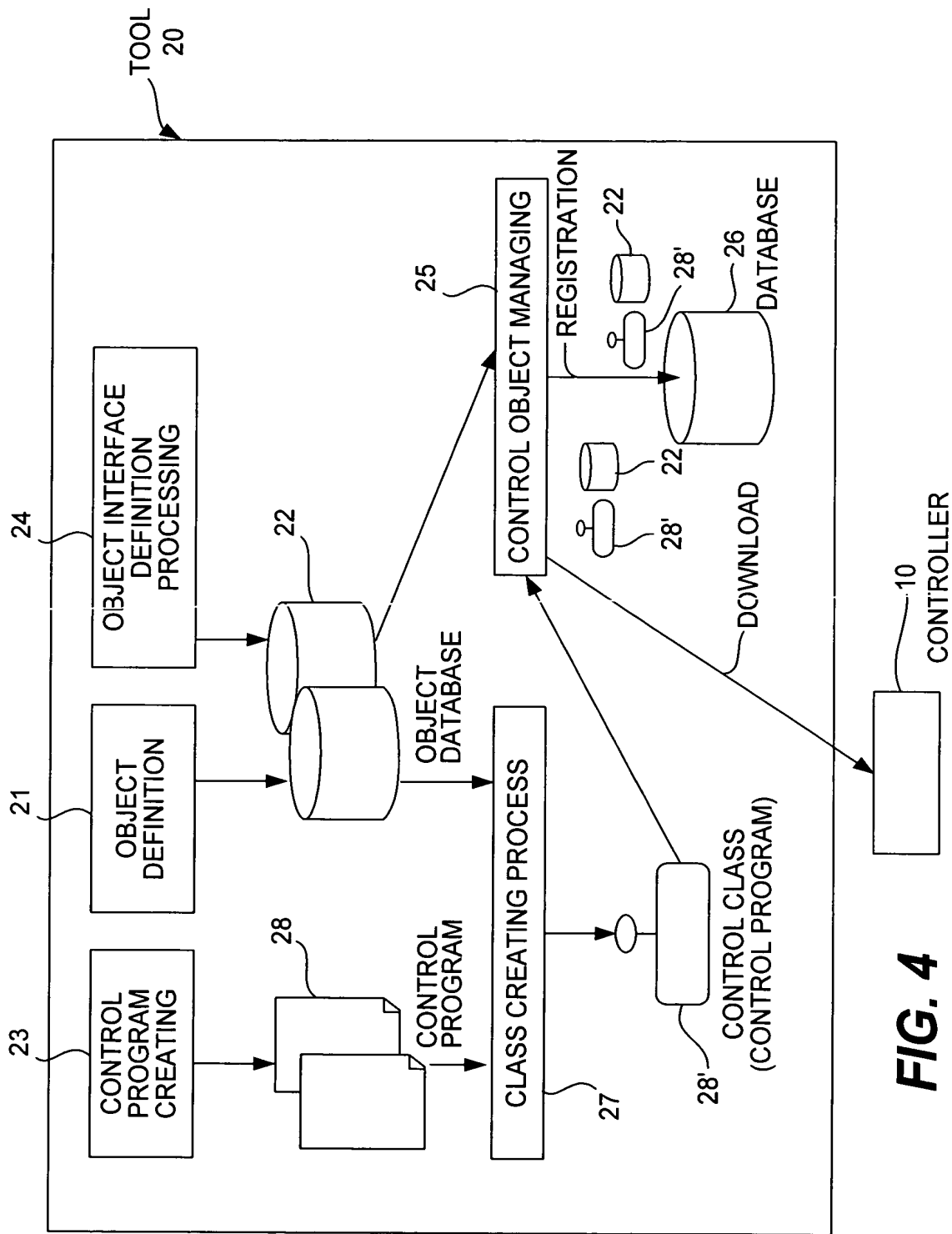


FIG. 4

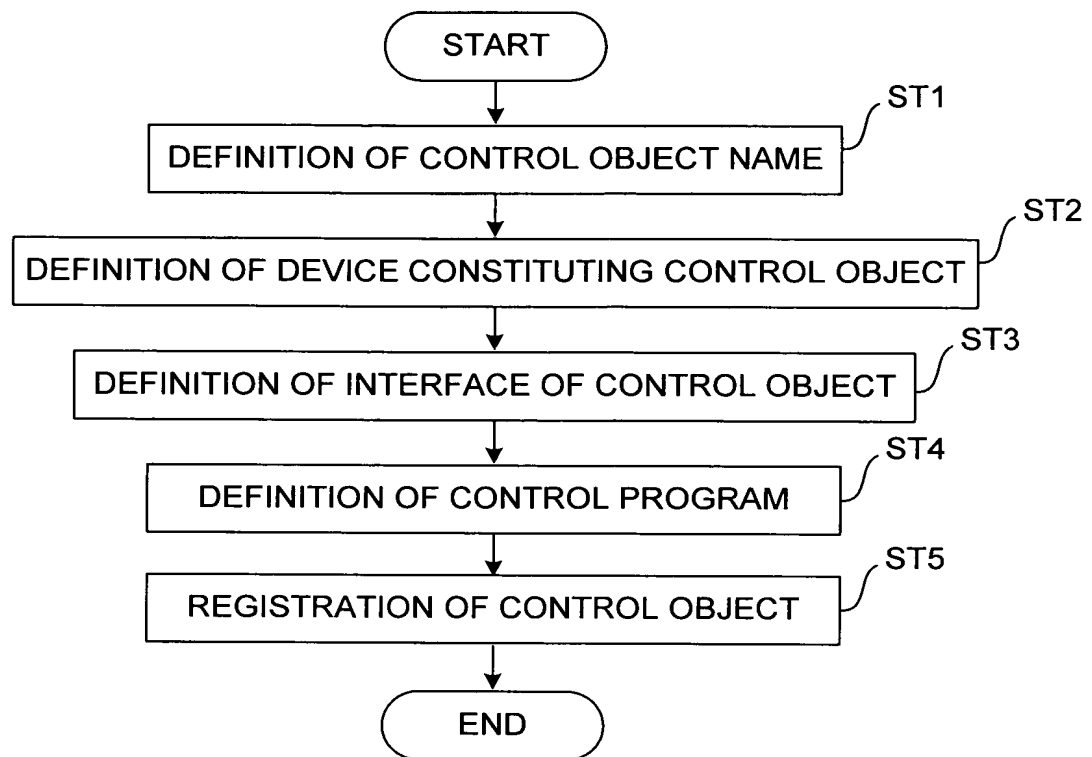


FIG. 5A

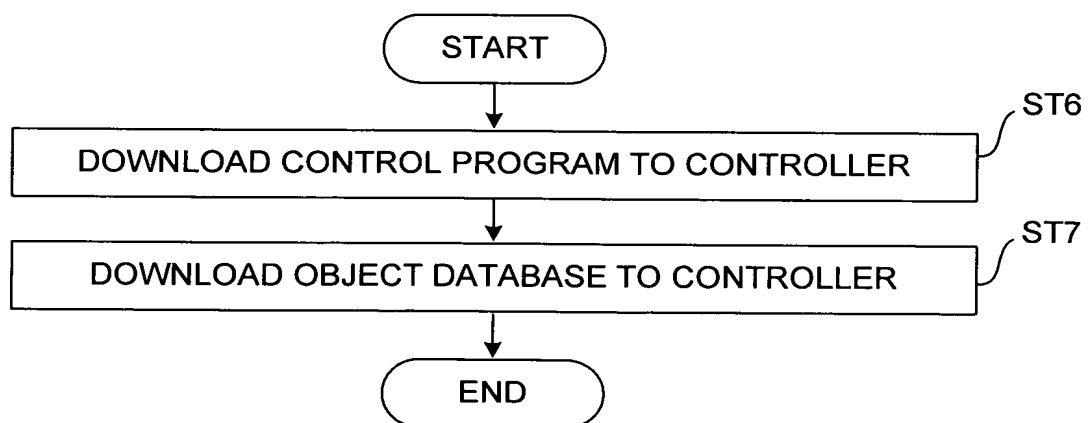


FIG. 5B

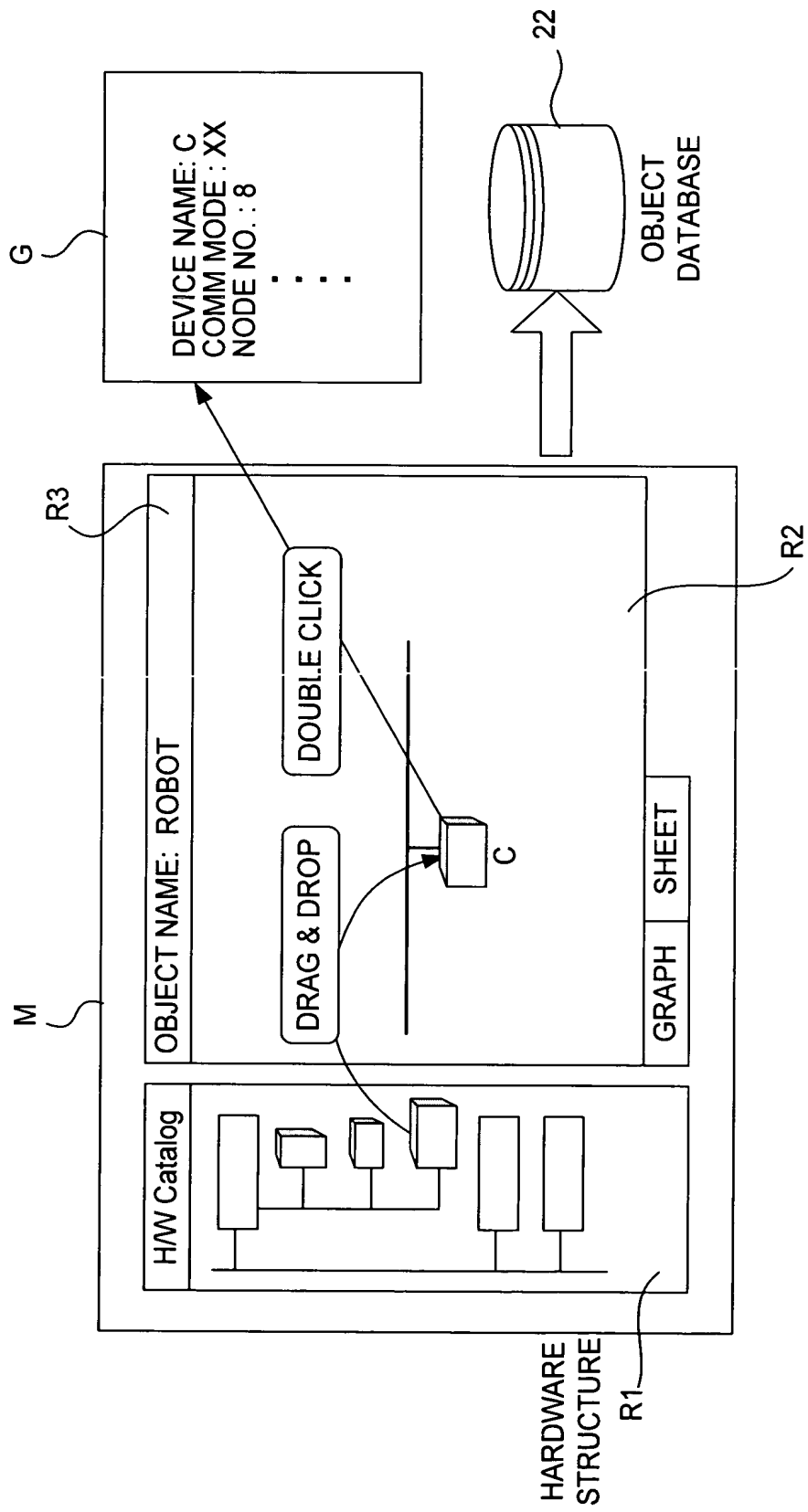


FIG. 6

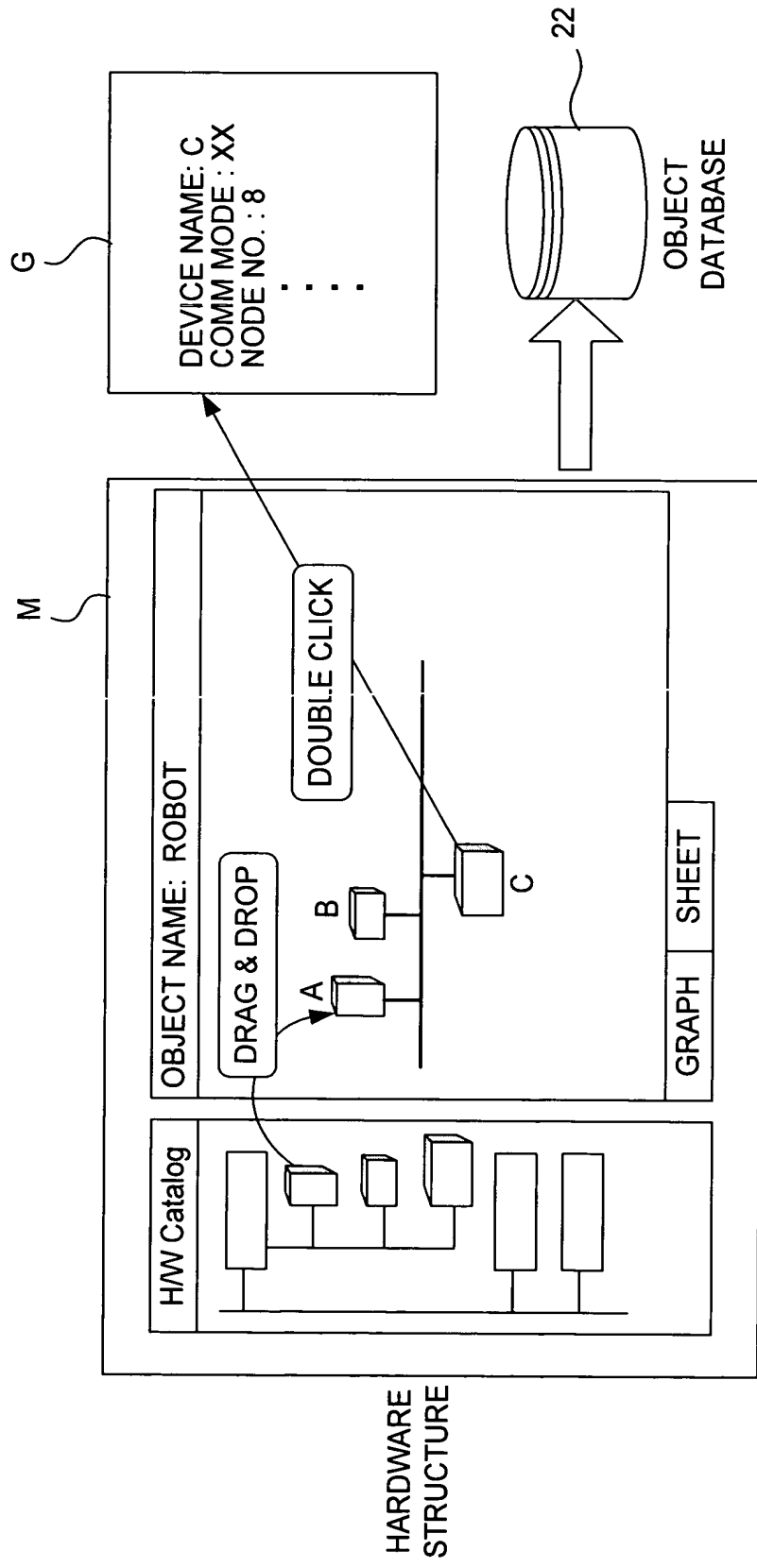


FIG. 7

```

[Profile]
ObjName= ROBOT

DeviceNum=1
DevName0=C
SerialNo0=
NodeNo0=8 // COMMUNICATION ADDRESS
INSize0=2 //byte
INadr0= // MAPPED ADDRESS TO CONTROLLER MEMORY
OUTSize0=2 //byte
OUTadr0= // MAPPED ADDRESS TO CONTROLLER MEMORY
Communication0=0 // COMMUNICATION MODE

```

FIG. 8

```

BYTE Add_Val(BYTE X, BYTE Y)
{
    BYTE A, B; C
    Get_Attribute("IN_param1", A);
    Get_Attribute("IN_param2", B);
    C=A+B
    Set_Attribute("OUT_param1, C);
    Return C
}

```

FIG. 11

```

ObjName= ROBOT

DeviceNum=3
DevName0=C
SerialNo0=
NodeNo0=8
INSize0=2
INadr0=
OUTSize0=2
OUTadr0=
Communication0=0

DevName1=A
SerialNo1=
NodeNo1=3
INSize1=4
INadr1=
OUTSize1=4
OUTadr1=
Communication1=0

DevName2=B
SerialNo2=
NodeNo2=1
INSize2=1
INadr2=
OUTSize2=1
OUTadr2=
Communication2=0

```

FIG. 9

[Profile]

ObjName= ROBOT

DeviceNum=1

DevName0=C

SerialNo0=

NodeNo0=8 // COMMUNICATION ADDRESS

INSize0=2 // byte

INAdr0= // MAPPED ADDRESS TO CONTROLLER MEMORY

OUTSize0=2 // byte

OUTAdr0= // MAPPED ADDRESS TO CONTROLLER MEMORY

Communication0=0 // COMMUNICATIONS MODE

[Attribute]

IN_Num=2

ValName0=IN_Param1 // VARIABLE NAME

ValSize0=1 // 1byte // VARIABLE SIZE

Adr0=0/0 // ADDRESS INSIDE CONTROL OBJECT (0 BIT OF 0 CH)

ValName1=IN_Param2 // VARIABLE NAME

ValSize1=1 // byte // VARIABLE SIZE

Adr0=0/8 // ADDRESS INSIDE CONTROL OBJECT (8 BIT OF 0 CH)

OUT_Num=2

ValName0=OUT_Param1

ValSize0=1 // 1byte // VARIABLE SIZE

Adr0=0/0 // ADDRESS INSIDE CONTROL OBJECT (0 BIT OF 0 CH)

ValName1=IN_Param2 // VARIABLE NAME

ValSize1=1 // byte // VARIABLE SIZE

Adr0=0/8 // ADDRESS INSIDE CONTROL OBJECT (8 BIT OF 0 CH)

[SERVICE]

FIG. 10

[Profile]

ObjName= ROBOT

DeviceNum=1

DevName0=C

SerialNo0=

NodeNo0=8 // COMMUNICATION ADDRESS

INSize0=2 // byte

INAdr0= // MAPPED ADDRESS TO CONTROLLER MEMORY

OUTSize0=2 // byte

OUTAdr0= // MAPPED ADDRESS TO CONTROLLER MEMORY

Communication0=0 // COMMUNICATIONS MODE

[Attribute]

IN_Num=2

ValName0=IN_Param1 // VARIABLE NAME

ValSize0=1 // 1byte // VARIABLE SIZE

Adr0=0/0 // ADDRESS INSIDE CONTROL OBJECT (0 BIT OF 0 CH)

ValName1=IN_Param2 // VARIABLE NAME

ValSize1=1 // byte // VARIABLE SIZE

Adr0=0/8 // ADDRESS INSIDE CONTROL OBJECT (8 BIT OF 0 CH)

OUT_Num=2

ValName0=OUT_Param1

ValSize0=1 // 1byte // VARIABLE SIZE

Adr0=0/0 // ADDRESS INSIDE CONTROL OBJECT (0 BIT OF 0 CH)

ValName1=IN_Param2 // VARIABLE NAME

ValSize1=1 // byte // VARIABLE SIZE

Adr0=0/8 // ADDRESS INSIDE CONTROL OBJECT (8 BIT OF 0 CH)

[SERVICE]

ServiceNum=1

ServiceName0=BYTEAdd_Val([IN]BYTE X[IN]BYTE Y)

FIG. 12

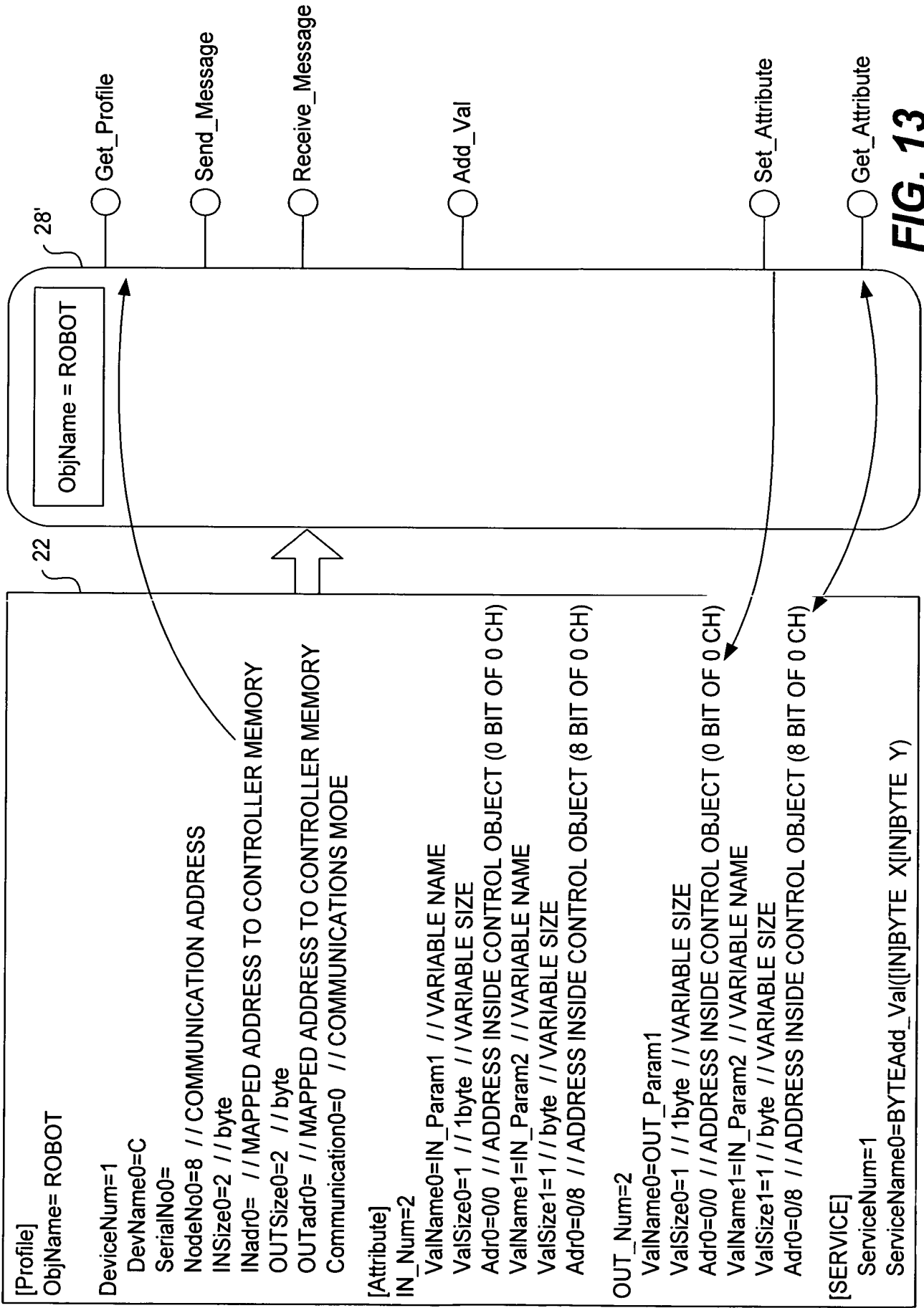


FIG. 13

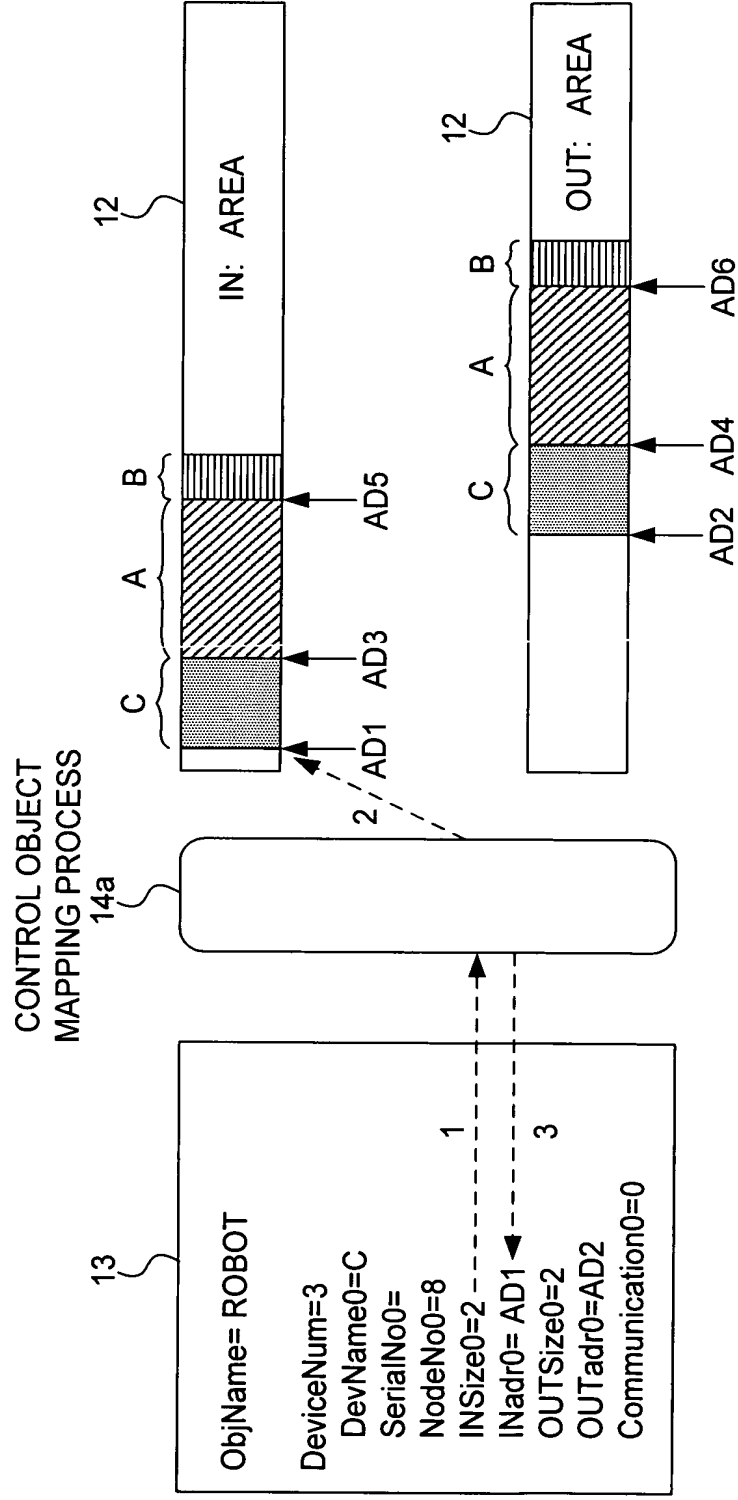


FIG. 14

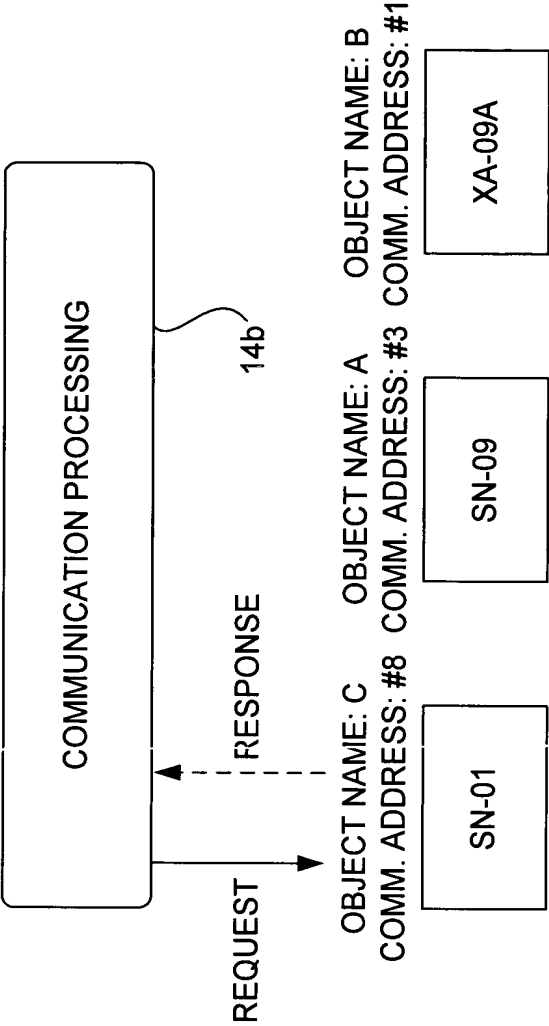
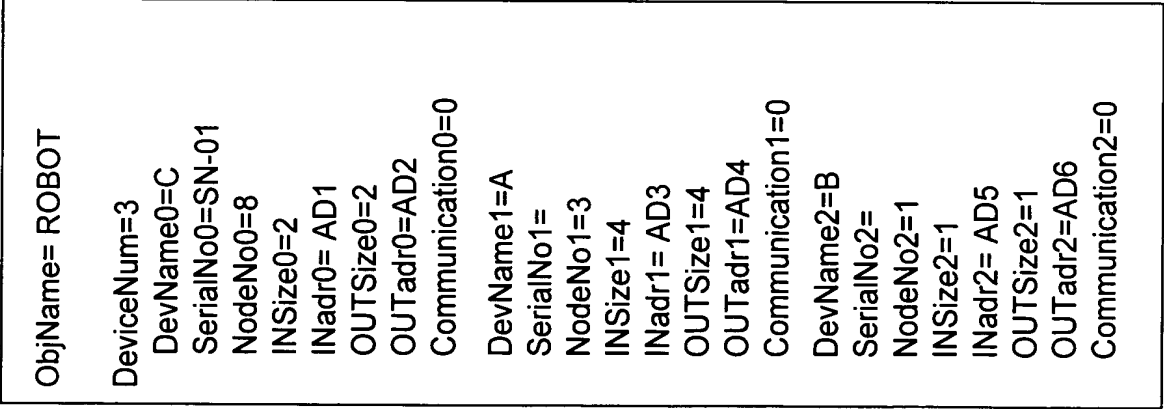


FIG. 16

FIG. 15

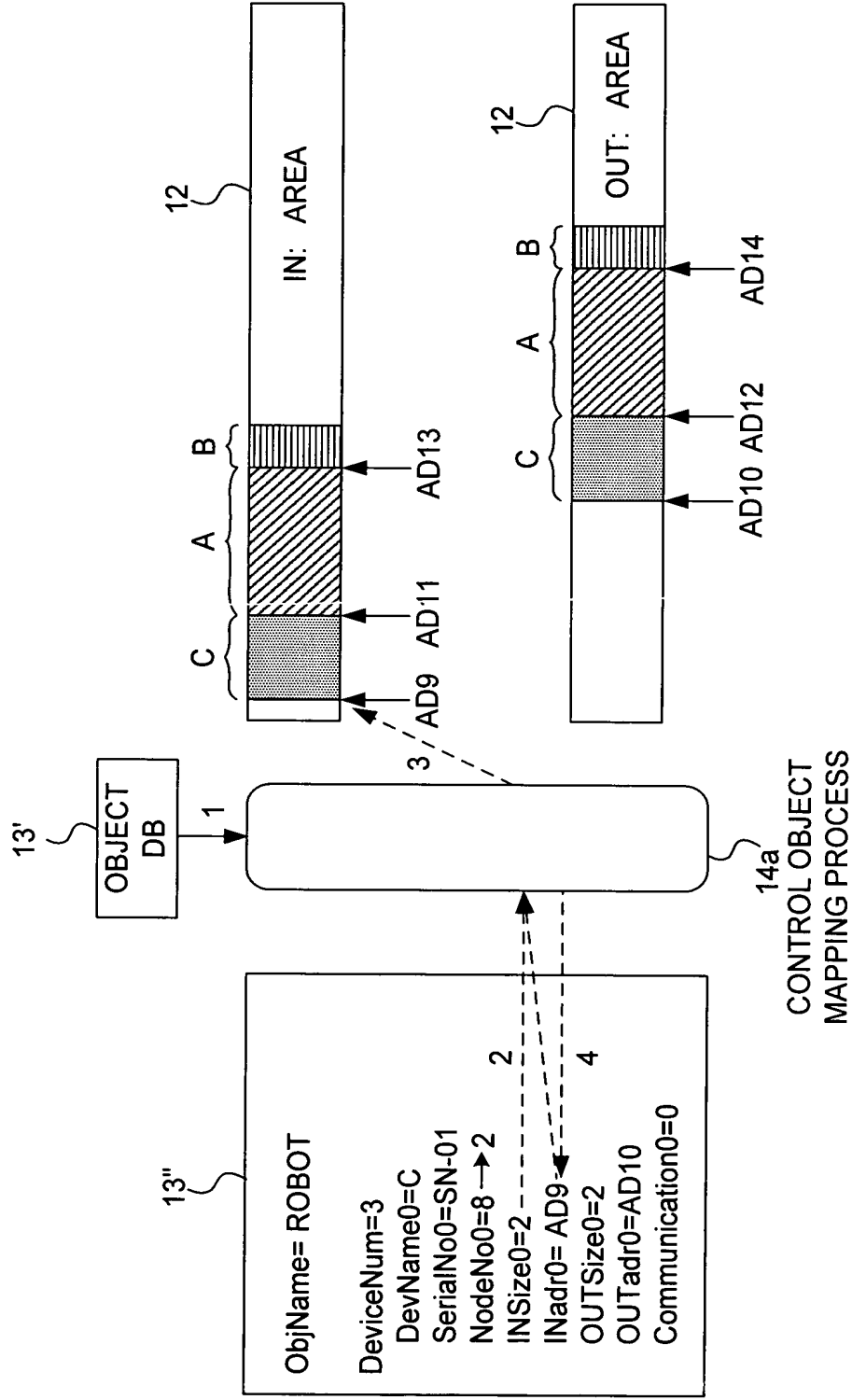


FIG. 17

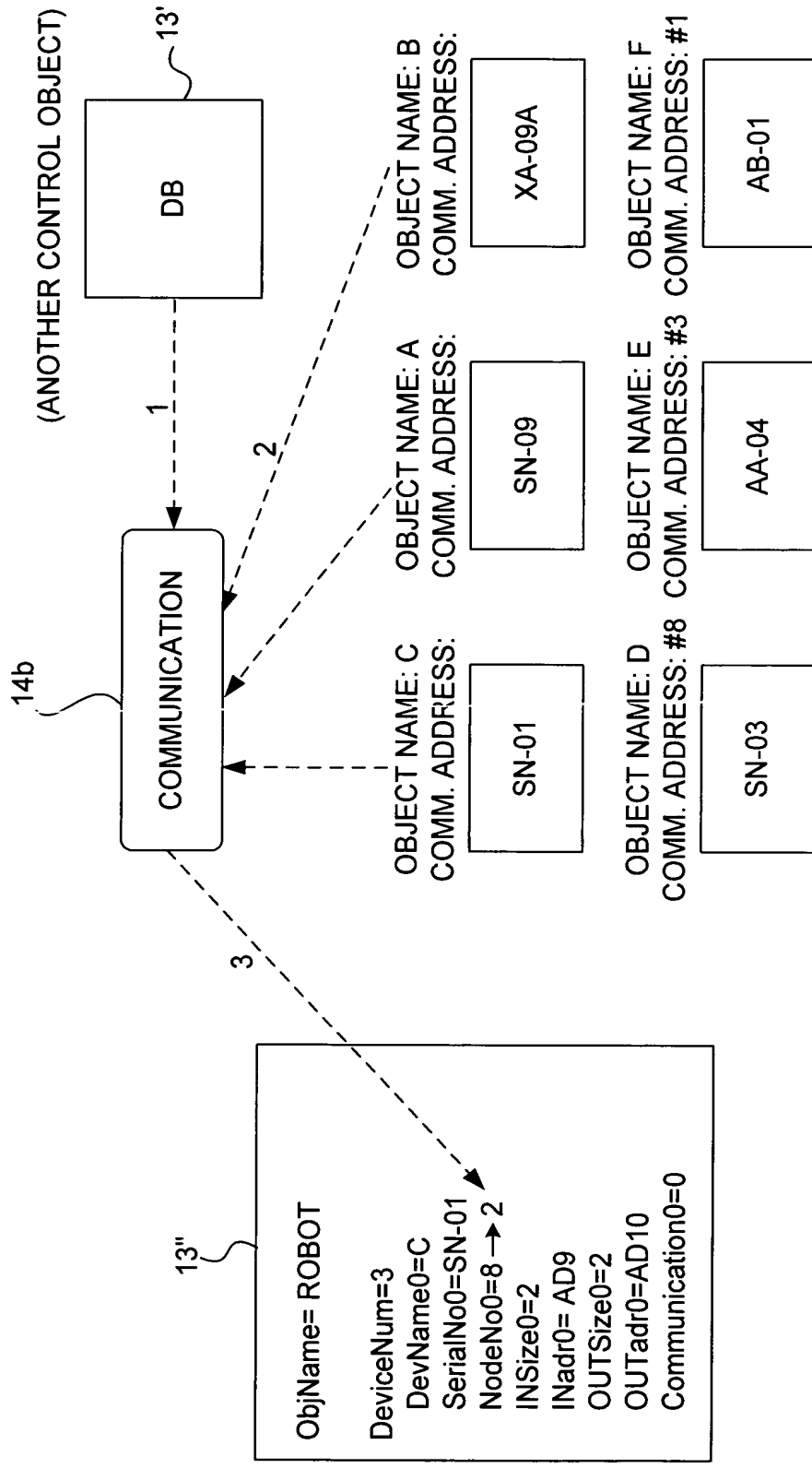


FIG. 18

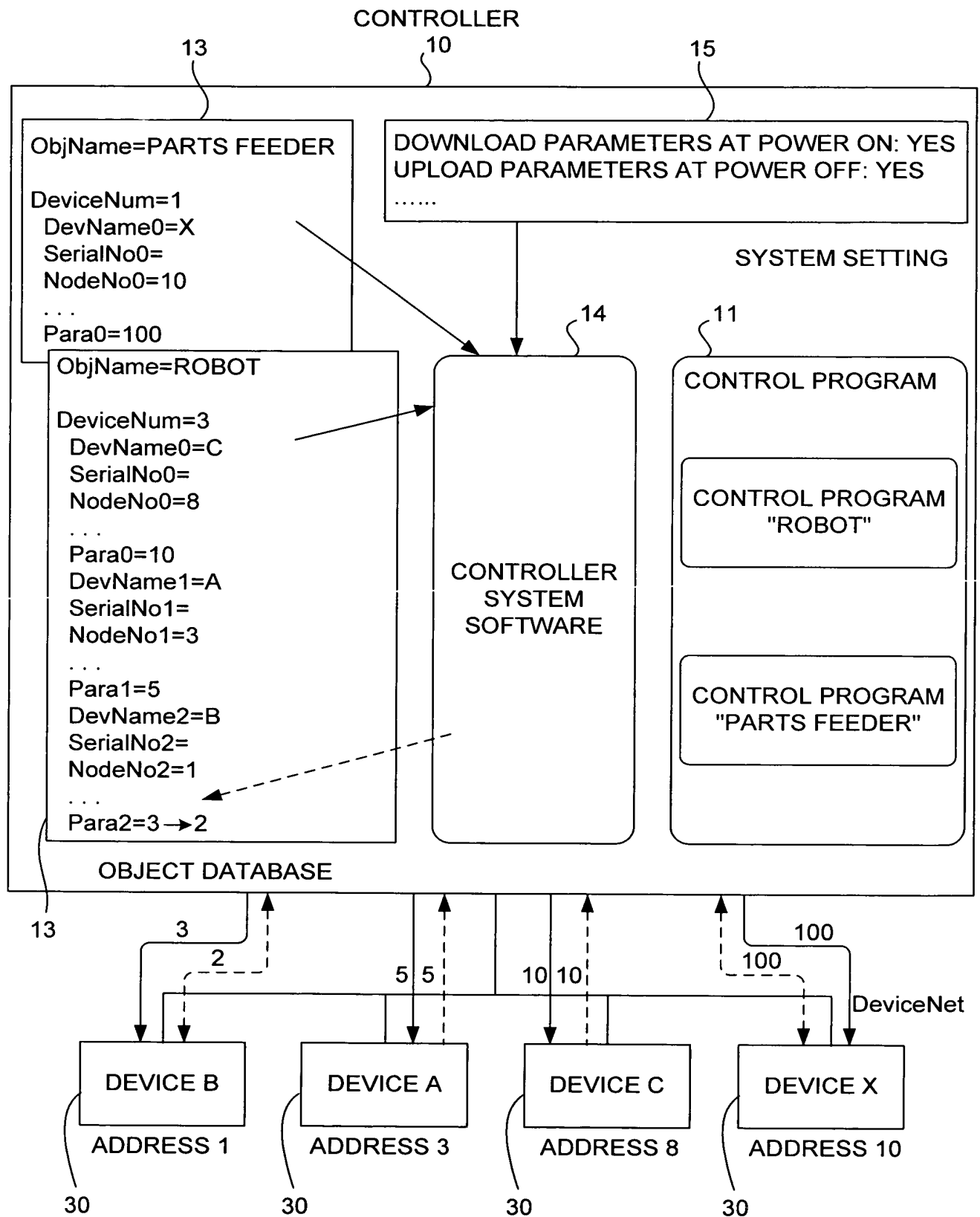


FIG. 19

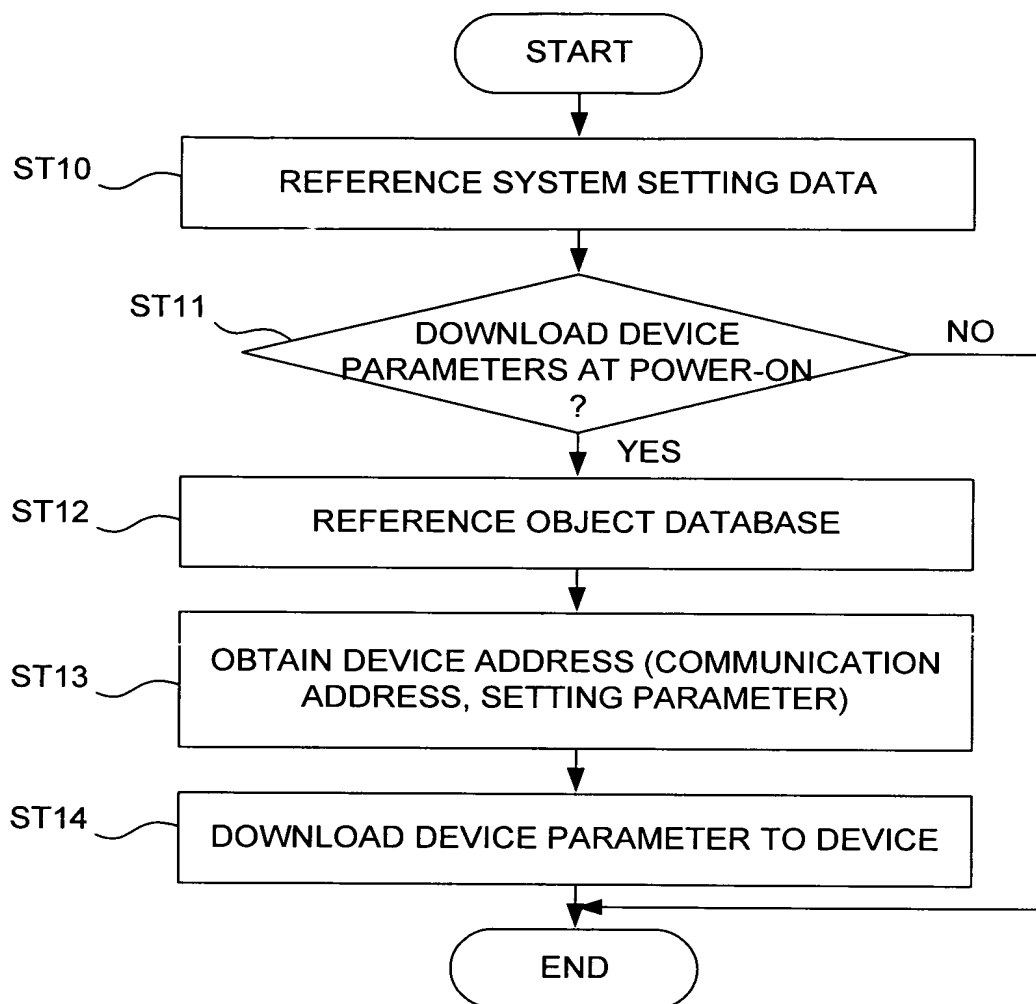


FIG. 20

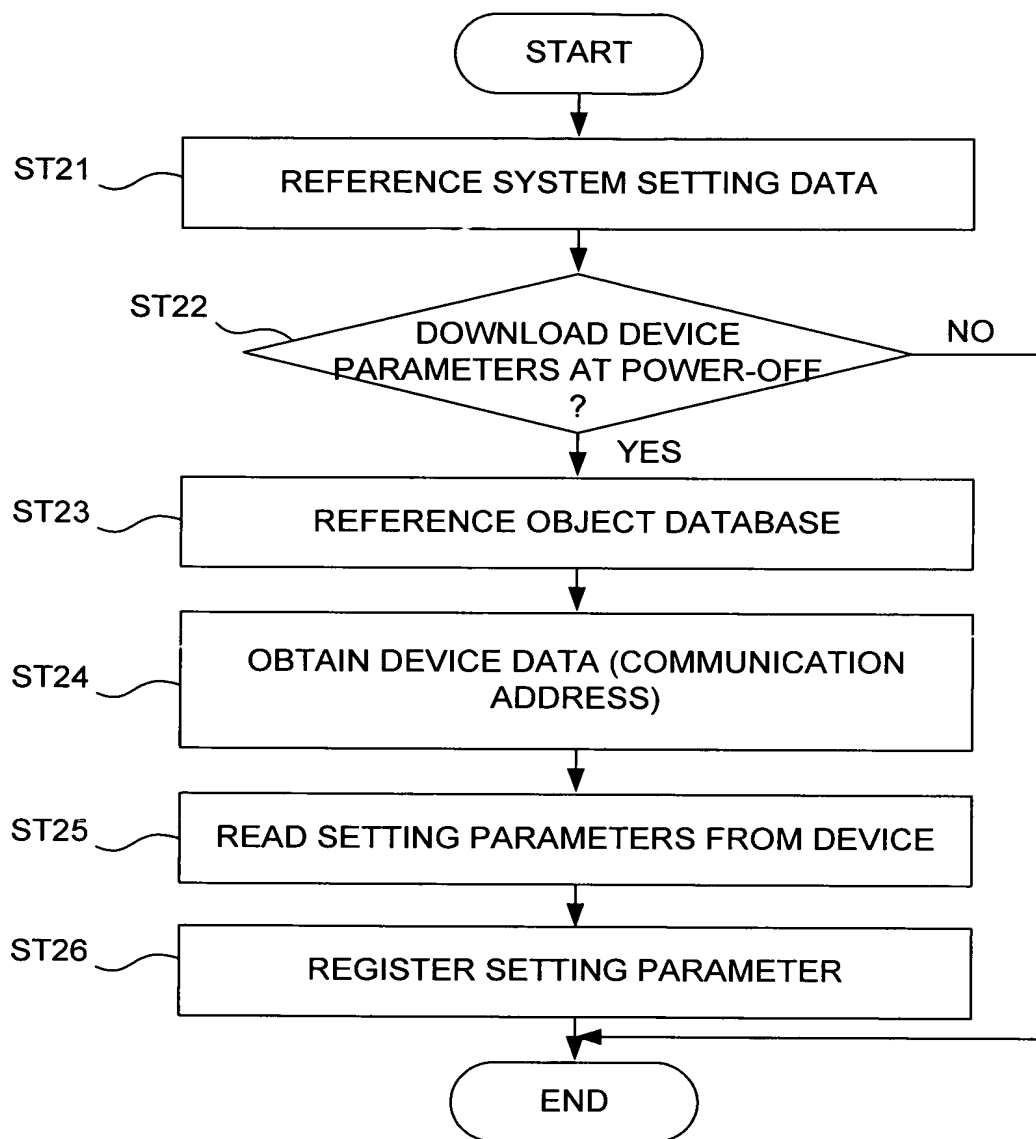


FIG. 21

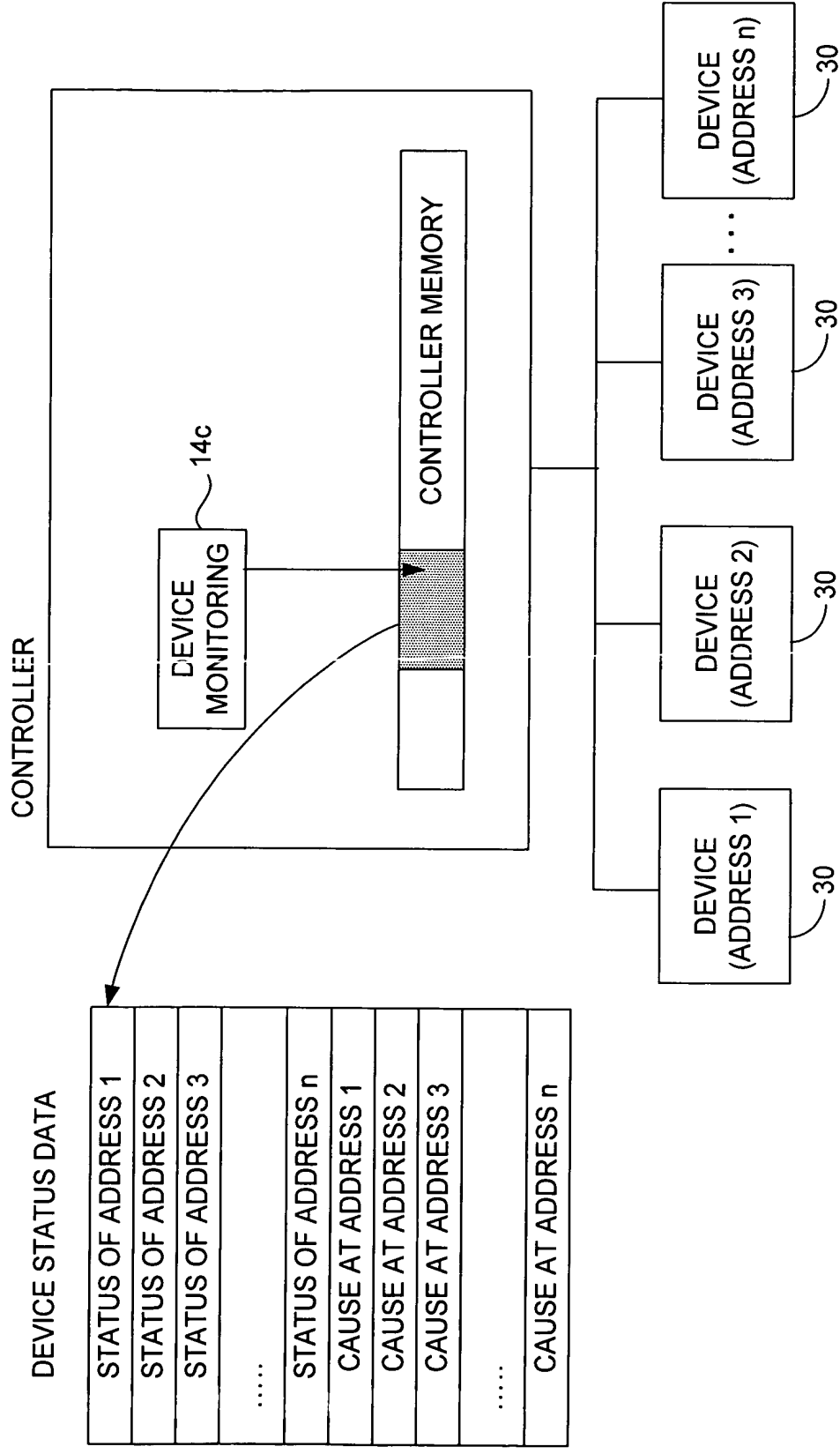


FIG. 22

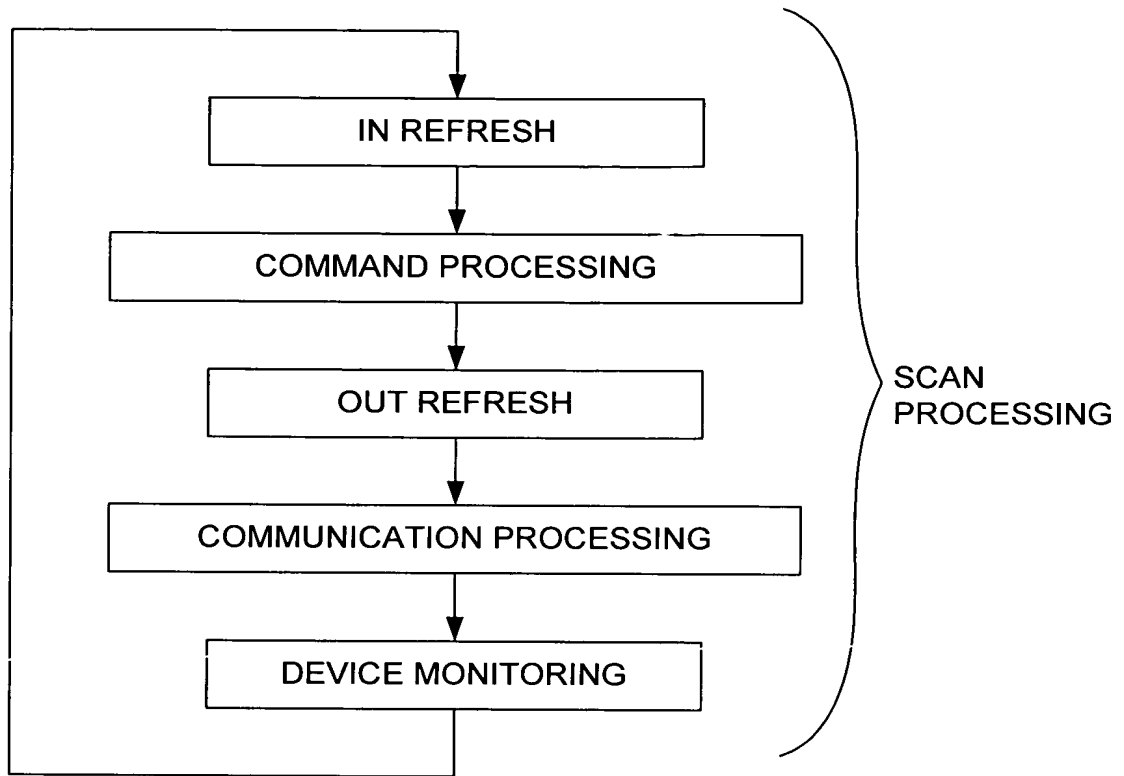


FIG. 23

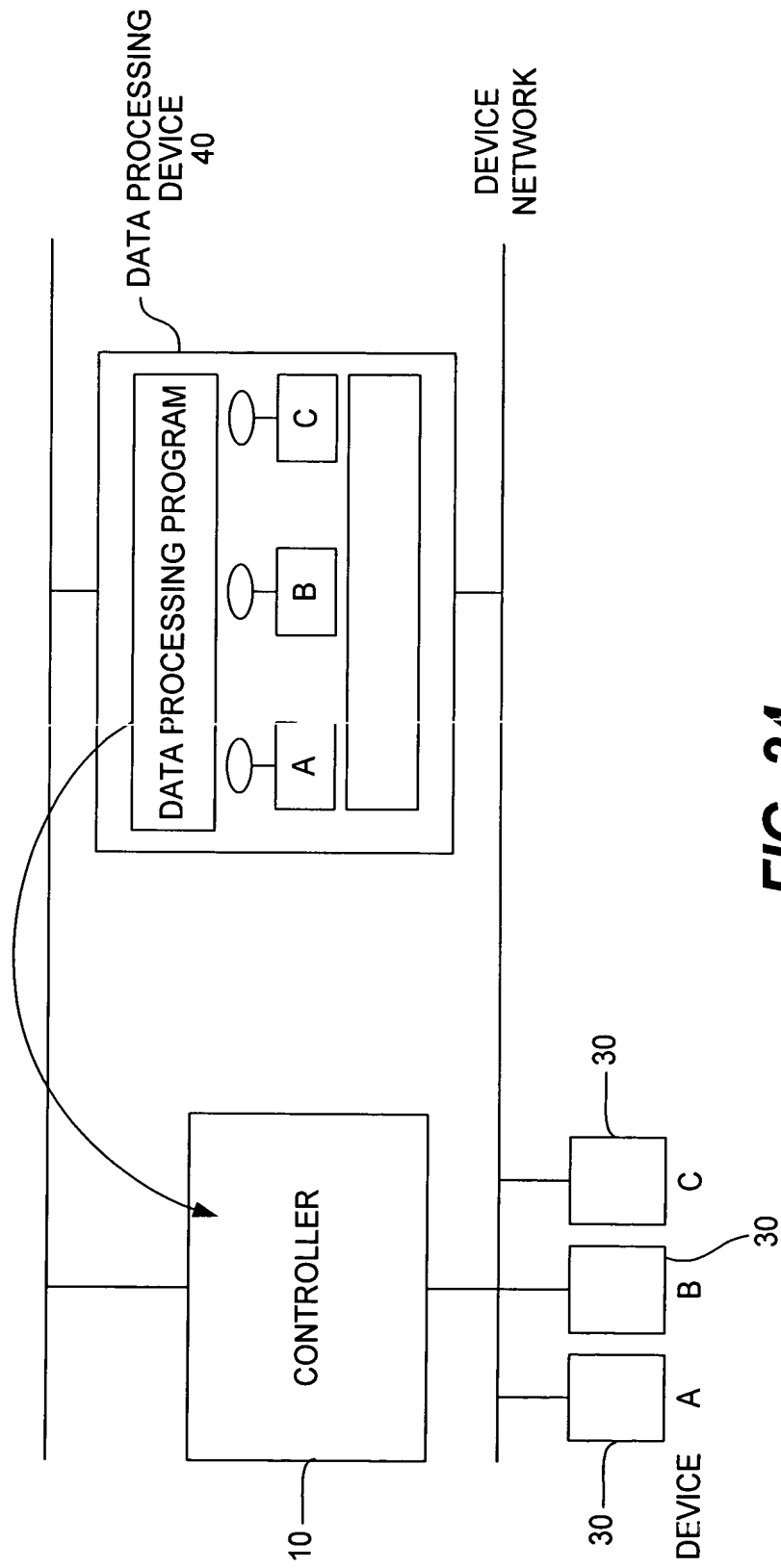


FIG. 24